

CLAIMS:

1. A robot with a sensor, the robot comprising:  
    sensor means and  
    sensor disposal position changing means for changing an disposal position of the sensor means from one position to another, wherein a plurality of positions including positions at and around a robot arm are set in advance as positions where the sensor means is disposed.
2. A robot with a sensor according to claim 1, wherein one of the plurality of sensor means disposal positions is provided in an acting position where the sensor means is used while mounted to a tip end of the robot arm and another is provided in a retreat position where the sensor means retreats from the acting position when not used.
3. A robot with a sensor according to claim 2, wherein the acting position of the sensor means is near working means mounted to the tip end of the robot arm and the retreat position is on the robot arm.
4. A robot with a sensor according to claim 2 or 3, wherein protecting means for the sensor means is provided in the retreat position.
5. A robot with a sensor according to claim 2 or 3, wherein cleaning means for the sensor means is provided in the retreat position.
6. A robot with a sensor, the robot comprising:  
    sensor means and

sensor disposal position changing means for changing a disposal position of the sensor means from one position to another, wherein a plurality of positions are set in advance on a robot arm as positions where the sensor means is disposed.

7. A robot with a sensor according to claim 6, wherein one of the plurality of sensor means disposal positions is provided in an acting position where the sensor means is used while mounted to a tip end of the robot arm and another is provided in a retreat position where the sensor means retreats from the acting position when not used.

8. A robot with a sensor according to claim 7, wherein the acting position of the sensor means is near working means mounted to the tip end of the robot arm and the retreat position is on the robot arm.

9. A robot with a sensor according to claim 7 or 8, wherein protecting means for the sensor means is provided in the retreat position.

10. A robot with a sensor according to claim 7 or 8, wherein cleaning means for the sensor means is provided in the retreat position.

11. A robot with a sensor according to claim 1 or 6, wherein the sensor means is a visual sensor having a camera for taking a two-dimensional image.

12. A robot with a sensor according to claim 1 or 6, wherein the sensor means is a measuring sensor for carrying out a three-dimensional measurement by using laser light.

13. A robot with a sensor according to claim 1 or 6, wherein

the sensor means is a force sensor for outputting a signal according to an external force.

14. A robot with a sensor according to claim 1 or 6, wherein the sensor disposal position changing means is formed of retaining means for retaining the sensor means provided in each the disposal position and software in which a setting for controlling operation for handing the sensor means from one of the retaining means to another and carried out by the robot on its own is stored.

15. A robot with a sensor according to claim 1 or 6, wherein the sensor disposal position changing means is formed of driving means provided to an arm having a wrist at its tip end to drive the sensor means forward and backward to a working position and a retreat position, working means of the robot being mounted to the wrist.